

WATERSHED WRAP

Quarterly Newsletter from the Coeur d'Alene Tribe's Fish & Wildlife Program describing watershed management efforts. Offering readers food for conversation and paper for wrapping!



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The Coeur d'Alene Tribe's Fish, and Wildlife Programs work in a variety of cooperative, governmental and educational arenas in efforts to protect, enhance and restore our Fish and Wildlife resources. This publication is intended to provide all people interested in fish, water and wildlife of the Coeur d'Alene Reservation information about our program, and to solicit your support as well as constructive criticism. Thank you for your interest.

Respectfully,

Mark H. Stanger, Fish, Water and Wildlife Outreach Specialist

Lake Creek Meeting To Be Announced In January!

The Water Quality and the Fish & Wildlife Programs plan to host a Lake Creek Watershed Work Group meeting sometime in early 2004. The primary topics to be discussed will be water quality TMDL standards and an update on the restoration projects we are working on in the Lake Creek Watershed. Current planning efforts will also be discussed.



This meeting will be held at the Coeur d'Alene casino in the Coeur d'Alene room at a date and time still to be determined. For any additional information call Dee Anne Bailey at 208-686-1803 or Angelo Vitale 686-6903.

A New Trail is Coming to Town!

By Dean Chapman, Trail Manager

With the growing popularity of outdoor recreation activities, such as cycling, walking and running, and so on, people are looking for a quality recreational facility like the "Trail of the Coeur d'Alenes". This trail offers a diverse variety of activities to trail users.

This past summer trail usage has been high. It's anticipated that use will increase next summer when the trail should be fully open. Our program has

been receiving calls and e-mails from people wanting trail information from as far away as New York. We have been talking with the state's trail crew and the local communities about trail usage and they've reported that traffic on the trail has been heavy at times and local businesses have seen an increase in customers since the Rails to Trails opened this past spring. It's so awesome to see so many people of all ages using the trail and having fun this early before the final trail construction phase is even complete.

Sometime in the spring of 2004, the Coeur d'Alene Tribe and the Idaho Department of Parks and Recreation will take over the Union Pacific Railroad Right of Way (ROW). This transfer will be made under a process called "rail banking". Meaning that the Tribe and State will own and manage the ROW as a recreational trail. As part of this agreement the trail could be transferred back to Union Pacific in the future if ever needed.



The trail is 72 miles long and stretches from Mullan to Plummer. The Tribe's portion of the trail is 15 miles long, and runs from just below Harrison along the eastside shoreline and crosses over to Heyburn State Park shoreline then travels westward up the Plummer Creek canyon into Plummer.

The trail going through the reservation is open to the public with only minor obstacles still in the way. One of those obstacles is the Chatcolet Swing Span Bridge. The steel structure is currently closed to public crossing and is being fully repainted, and the expected completion date for bridge construction is sometime between January and February 2004. Construction of the Plummer Trailhead is also not finished. The 40-unit parking lot just has base rock laid down with a sidewalk and cement border. A public restroom and a trail interpretive sign needs erected and a small portion of the trail near the trailhead needs paved. Construction is closed down for the winter and this part of the trail will be finished in the spring of 2004.

Some trail path features within the reservation include: 5 restrooms (w/interpretive panel, picnic table, benches, and bike rack), milepost signs, traffic/information signs, trail bollards, and two trailhead parking lots with interpretive panel. Sometime this spring the trail contractors will install roadside trailhead signage directing people on how to get to the recreational trail.

This trail helps people reconnect with themselves and others, provides a safe place for people of all ages and abilities to play, brings recreation and tourism dollars into local communities, creates new relationships between agencies and communities, and best of all it promotes personal excises and good health.

I encourage everyone to go check out the trail because it is a tremendous opportunity to enjoy the outdoors. The tribe owns 15 miles of trail so we must all work together to make this trail safe and fun for everyone.

If anyone has any questions or wants to report a trail matter please call the trail office at (686-7045) or if you want to visit in person the office is located in the new Fish and Wildlife building which is west of the Wellness Center at the end of the corner. Looking forward to seeing all of you on the trail.

New Employee for the Fisheries Program!

By Dale Chess, Research Monitoring and Evaluation Biologist

Hello, my name is Dale Chess. I started working in the Fisheries Program on December 1st. I was hired as the Research Monitoring and Evaluation Biologist, and will provide technical and field support to all fisheries restoration projects in the program. My wife (Joni) and I have two daughters, Jessica, age 13 and Tarah, age 10. My wife and I grew up in Spokane and enjoy the Inland Empire area. I received my bachelors and masters degrees in biology from Eastern Washington University and a doctorate

from The University of Montana in aquatic ecology in 1998.

I have a broad background in aquatic sciences and have held positions in water quality and salmonid fisheries. My past experience includes working for the Utah Department of Environmental Quality where I developed monitoring and evaluation plans that measured physical, chemical and biological responses from restoration treatments in 303d listed streams. For the past three years I worked for the Oregon Department of Fish and Wildlife as a research project leader for a salmon restoration project on the Umatilla River, a project funded by the Bonneville Power Administration. I feel fortunate to have the opportunity to work for the Coeur d'Alene Tribe and look forward to helping the tribe restore healthy ecosystems and native fish populations on existing tribal and aboriginal lands.

Collecting our Traditional Water Potatoes!

By Mark H. Stanger, Outreach & Education

Water Potato Day is a celebration of Tribal history; tradition and culture culminating with a harvest of the plants that grow in the shallows of the lakes and streams specific to this region.

At this years celebration we focused on providing the cultural aspect associated with water potatoes. Just like any Tribal gathering an opening honor song was performed to give a good blessing to our water potatoes. The Honor Song was followed by drumming and singing, which included a few rounds of dance songs so everybody could participate.

Attendance at this year's collection was one of the biggest. Approximately 500 people attended our Water Potato Day Celebration. There were a lot of students that wanted to attend this year's event. In order to accommodate the large number of students that wanted to attend, the celebration was held on two successive days. The two-day celebration had many schools attending like Plummer/Worley Middle & Senior High schools, St. Maries and Kootenai High schools, Worley, Harrison and Oakesdale 4th grade classes, and the Coeur d'Alene Tribal school. Also we had students and faculties from two colleges participate, including the University of Idaho and Spokane Community College. We even invited the local communities to participate and one family had invited their visitors from Scotland to get muddy with the youth digging water potatoes. The visitors were very interested in talking with some local Tribal members.

We had four activities planned for all students attending this year's water potato day celebration. The

first station was digging water potatoes with Jeff Jordan; the second station was bird viewing and nature walk with Dan Jolibois; the third station was Tree & Plant Identification with Dave Lamb & Dave Clark; and the last station was story telling from Flex Aripa and Rodney Frey. Raymond Brinkman introduced students to a familiar game called "Simon Says" but the catch to this game was trying to figure out what kind of words were spoken. The dialect was in the Coeur d'Alene language. Which made it a little bit harder to understand and play.

There were other schools that wanted to attend, but we couldn't fit them in this year's schedule due to limited time available. Next year I will send out flyers to the local schools that want to attend. The drum group *Red Sky* closed with a song to bless the harvest of the water potatoes so there would be an even bigger and better crop to grow next year.

A special thanks is given to the Coeur d'Alene Casino and the Coeur d'Alene Tribe for donating the tee shirts to commemorate this year's celebration.



Tribal youth digging water potatoes.

North Fork Rock Creek Watershed Assessment Completed

By Dave Lamb, Wetland Habitat Biologist

The Coeur d'Alene Tribe Fisheries Program staff have recently finished a report to the Bonneville Environmental Foundation (BEF), a private foundation supporting the development of renewable energy projects and the restoration of damaged watersheds. This report summarizes watershed assessment work which was partially funded by BEF and included work performed by Tribal Fisheries, GIS and Environmental Programs staff and a consultant. This report is the first step needed to bring some habitat restoration funding to the North Fork Rock Creek watershed.

The incentive or impetus for this assessment was the listing of this creek as a water quality impaired

water body on Washington State's "303d list" (for sediment and nutrients) and the need to collect basic information on watershed processes and historic conditions. Basically, the entire watershed in both Washington and on the Reservation has been greatly affected by the conversion of forests and wetlands to cropland.

The specific scope of the watershed assessment included development of base maps of the watershed area showing existing and historic land uses (especially wetlands, forest land and cropland), sediment sources and fish habitat. In addition, the stream channel was to be divided into logical habitat reaches and each reach described in terms of slope, sinuosity, proportion of various habitat types (riffles or pools for example), substrate (silt, sand or gravel) and canopy cover (shade from trees). Finally, a Habitat Protection Plan was to be developed which would provide a procedure for identifying key areas for habitat or water quality restoration.

The current land uses in this watershed are cultivated cropland (13,110 acres or 58% of the watershed area), forestland (6,330 acres, or 28%), pasture or other grassland (2,710 acres or 12%) and residential / commercial development including roads (about 450 acres or 2% of the watershed area).

The headwaters of the North Fork Rock Creek lie to the north of Plummer, in the County Line Road area. From there, the creek flows to the east and north to Conkling Road, where it turns west passing Worley, the Tribal Casino, along Highway 58 and on into Washington. The watershed within the Coeur d'Alene Indian Reservation occupies 22,600 acres (35.3 square miles). The high point of the watershed is at 4002 feet and the outlet at the State line is at 2,580 feet, for a 1,422-foot elevation drop. Over the 15.9 mile length of the creek, this elevation drop yields a 1.7 % slope (gradient) overall. After dividing the stream channel into 11 "reaches", based primarily on physiographic features such as land cover (forest land, cropland, etc), the channel gradient was seen to vary between 0.2 % (in the forested area downstream of the Casino) and 8 % (at the headwaters).

One of the most important accomplishments of this watershed assessment was the erosion assessment (also called the sediment budget analysis). This effort, which utilized available map information (topography, soil types, land cover) with field observations, established a GIS (Geographic Information System) computer database that summarizes the sources, transport and storage of sediment within the watershed. For this project watershed land types were delineated and the potential for various erosional processes was determined. The erosional processes that were considered were soil creep, mass wasting (land slides), sheet, rill and gully erosion and road erosion. The

result of this effort was the estimation that, watershed wide, 53,986 tons of soil is detached each year and 14,693 tons each year are delivered to stream channels. The estimated average sediment delivery rate for the entire watershed is 0.6 tons per acre per year. Since erosion can be attributed primarily to cultivated cropland areas, the sediment delivery rate over these areas is 0.9 tons per acre per year. 93 % of the total soil detachment and 89 % of the total soil delivery to a channel was determined to come from sheet and rill erosion, with approximately 5 % from gullies, 0.4 % from roads and 0.9 % from soil creep. This information, along with estimated reductions in soil detachment and movement using alternative cropping scenarios will help the Tribe pursue erosion controls when willing landowners are found.

The assessment of fish habitat potential in the North Fork Rock Creek utilized water quality, water flow and channel substrate data. Unfortunately, the available data all point to very limited fish habitat, currently; especially for salmonid species. The most important time of the year is the summer period (July through September) when the water flow is the lowest and temperatures are highest. During this period, Rock Creek flow virtually ceases, leaving only isolated pool habitats available for fish. During this time, stream temperatures were typically between 54 and 66 ° F, which would be tolerable for fish, generally. Related to high water temperatures, however, is the lowered capacity for water to hold oxygen. During the July to September period, stream dissolved oxygen readings were typically between 0.3 and 8 milligrams per liter. Oxygen levels below 6 milligrams will not support many trout species (including cutthroat trout). Perhaps a greater problem in this watershed is the availability of spawning habitat, that is gravel bottom areas with good water movement and cool temperatures. The only gravel that was found was in limited headwater areas that do not have year-round flow. All downstream areas that might have sufficient flow were primarily silt or clay, which does not support fish spawning or the food organisms that many fish need to survive.

It can be seen from this watershed assessment that there are some significant challenges to improving the water quality and fish habitat in the North Fork Rock Creek. However, there are also some significant restoration opportunities, which will be available for the Tribe to pursue in the future. Not the least of these opportunities is the prospect of applying for restoration funding through the BEF or other sources. It is the intention of the Fisheries Program to develop grants that will provide funding for restoration planning and to implement these plans with interested landowners. So, if you are interested in habitat improvements and

you own land in this watershed, particularly on the stream or in adjacent riparian areas, please contact Angelo Vitale (686-6903) or Dave Lamb (686-6206) to discuss this.



New staff hires: Dale Chess, Fisheries and Ed Hale, Lake Management Program.

New Employee for the Lake Management Program!

By Ed Hale, Navigable Waters Specialist

Hello, my name is Ed Hale the new Navigable Waters Specialist for the Coeur d'Alene Tribe. I grew up (though my wife contends otherwise) in Pennsylvania. I moved west to go to school and eventually graduated from Washington State University with degrees in Biology and Environmental Science.

Some of my responsibilities for the program will be regulating lake encroachments, docks primarily. I have 18 years of regulatory experience from my previous position with the Panhandle Health District where I supervised programs for septic systems, restaurants, solid waste and ground water quality among others.

Currently I am working with Rich Curry on matching the inventory information he gathered this summer to match the legal descriptions and names. We have 519 encroachments identified by the survey and at the moment I believe we have 266 contacts in the database. Permit compliance so far that is only about half. Once the people who have not yet applied for a permit are identified, the program will be contacting those landowners directly and convincing them that now is the time to come into compliance with our program. Looking forward to meeting everybody in the area.

Hangman Restoration Project Update

By Gerald I. Green, Wildlife Biologist

Progress toward accomplishing substantial restoration of Hangman Creek was stalled in 2003 as the Bonneville Power Administration (BPA) dealt with projected funding shortfalls. BPA is the marketing arm of the Federal Hydropower System in the Northwest and is obligated to mitigate for losses to fish and wildlife populations caused by the construction of dams in the Columbia River Basin. Early in 2003, BPA was facing budget shortfalls as a result of both the lack of water in the Basin to power electrical generation and marketing strategies that failed to return anticipated revenues. As a means of dealing with the budget shortfall, BPA suspended the portions of mitigation activities that included property purchases. BPA funded the Hangman Restoration Project in planning and research efforts, but did not fund the acquisition of properties that could function to mitigate for losses suffered by the Coeur d'Alene Tribe through development of the Federal Hydropower System in the Columbia River Basin. Recent indications have lead us to believe that BPA has passed the budget crisis and is preparing to reinstate property acquisitions.

The indication that properties could be acquired in the coming year makes those of us involved in mitigation hopeful that substantive progress can still be made. Acquisition of areas that will provide specific benefits as fish and wildlife habitats is the surest means of gaining access to lands essential to restoration efforts. If we can complete acquisitions then the efforts we have spent in planning and researching the potential of the Hangman Watershed will be put to use to accomplishing on the ground restoration efforts. We will be moving beyond simple theory and begin a process that will result in long-term changes to specific areas within the Hangman Watershed.

However excited we are at the prospect of initiating on the ground restoration, we must acknowledge that the lack of property acquisitions in 2003 represents a lost opportunity in that we are now a year further behind in mitigation efforts that are already long overdue.

New Online Hunter Report System

By Nathan Albrecht, Fish and Wildlife Biologist

The Wildlife Program is currently in the process of creating a new method for people that hunt on the Reservation to report their annual hunting success. Beginning this winter, all hunters will be able to report their harvest information online. For those who do not have internet access, terminals are

available at the library as well as the Department of Education. This new hunter report form will be available on the Tribal web site. To access it, hunters should go to www.cdatribe.com, click on "Departments", then click on "Natural Resources". After choosing "Fish and Wildlife" there should be a "Hunter Report Form" thumbnail. Clicking on this will begin the process of reporting hunting success. First it will ask what species of animals were harvested during the current year, and then it will go into some more specific information for each species. The entire process should only take 5-10 minutes, and it will save hunters from having to fill out a form and mail it to the Wildlife Program, although these paper forms will still be accepted. The main goal for this new system is to increase our understanding of the wildlife populations on the reservation. An estimate of survival / mortality is one of the key pieces of information that managers need in order to understand the status of individual wildlife populations. In the past the majority of this information came from the Idaho Department of Fish and Game. This information, however, only gives a picture of what is being harvested by non-tribal hunters in the area. Information on harvest on the Reservation and Tribal harvest in general has traditionally been incomplete, with only a few hunter report forms being filled out each year. It is our hope that this new online system will make it easier for Tribal members and others hunting on the Reservation to report their harvest, and we can get a better understanding of the status of Tribal wildlife resources. For more information please contact me, Nathan Albrecht at 208-686-5521 nalbrecht@cdatribe-nsn.gov.

A Technician's Report on the 2003 Field Season

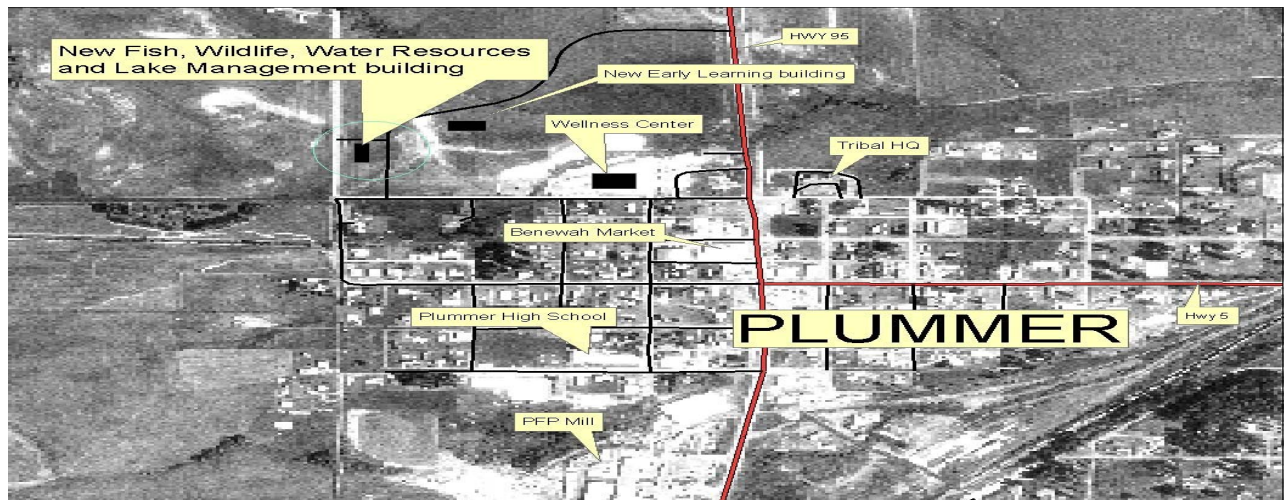
By Bryan Harper, Fisheries Technician

Hello my name is Bryan Harper and I work for Coeur d'Alene Tribal Fisheries program as a seasonal fisheries technician. I would like to tell you a little bit about what our crew has done through out this field season, which lasted from March through December. We started off in the springtime installing our fish traps throughout the Benewah and Lake Creek watersheds. We checked our traps daily to see if we had captured any fish in the traps. When we captured fish, we carefully transported them to a live well and proceeded to take measurements, such as lengths, weights, and collect scales to determine the age of the fish. Then we released them back into the stream. The cutthroat trout had a great run this past spring. It was one of the biggest I've seen in years more than 2,000 cutthroat were counted at the Lake Creek trap!

In late springtime we all participated in doing our yearly plantings in the watersheds. Over 7,000

Western Larch, Ponderosa Pine, Spruce, and Western Red Cedar seedlings and over 1,500 shrubs were planted. We planted mostly in the Benewah valley on the Johnson property. We planted trees and shrubs along the creek's edges to help create canopy cover to keep the water temperature cool for the fish. We planted a few thousand-conifer trees by other small meadows along the creeks for the same reason. Also, the trees are expected to provide cover for the wildlife.

In the early summertime our crew of about six people started a stream-surveying project. The project's objectives were to install permanent reference points and measure various stream attributes like the slope, channel shape, substrate condition and the volume of wood in the creek. This information will be used for determining how the stream environment changes over time and the effects of these changes on fish populations. This project took place in several different watersheds that included Lake, Benewah, Evans, and Alder creeks. A few small tributary creeks were added in the study. The whole project took a lot of hard work and it is hopeful that the time was well spent and the benefit will be better long term monitoring data leading to improved habitat projects and more fish. This has been one of the best seasons I have had here since I first started working for this program! I am looking forward to the next field season and all the new projects ahead.



The Fisheries, Water and Wildlife Programs and the Lake Management Department all moved into a new office building in downtown Plummer recently. The building is located just to the west of the Wellness Center. Come visit us and check out our new digs!